Abstract of the Disclosure

A receiver for a code division multiple access system includes a pilot symbol producing section, a frequency offset estimating section and a local signal generating section. The pilot symbol producing section produces pilot symbols of complex vector expression from a received radio frequency (RF) signal based on a first local frequency signal and a second local frequency signal. The first local frequency signal has a frequency obtained by shifting a frequency of a carrier signal by an IF frequency and the second local frequency signal has a frequency equal to the IF frequency. The pilot symbols have been subjected to inverse modulation to remove a modulation component. The frequency offset estimating section carries out in-phase adding operations to the pilot symbols of the complex vector expression over a predetermined interval in accordance with a predetermined pattern. Then, the frequency offset estimating section carries out a complex adding operation of results of the in-phase adding operations, and determines a frequency offset from a result of the complex adding operation. The local signal generating section generates the first and second frequency signals based on the determined frequency offset.